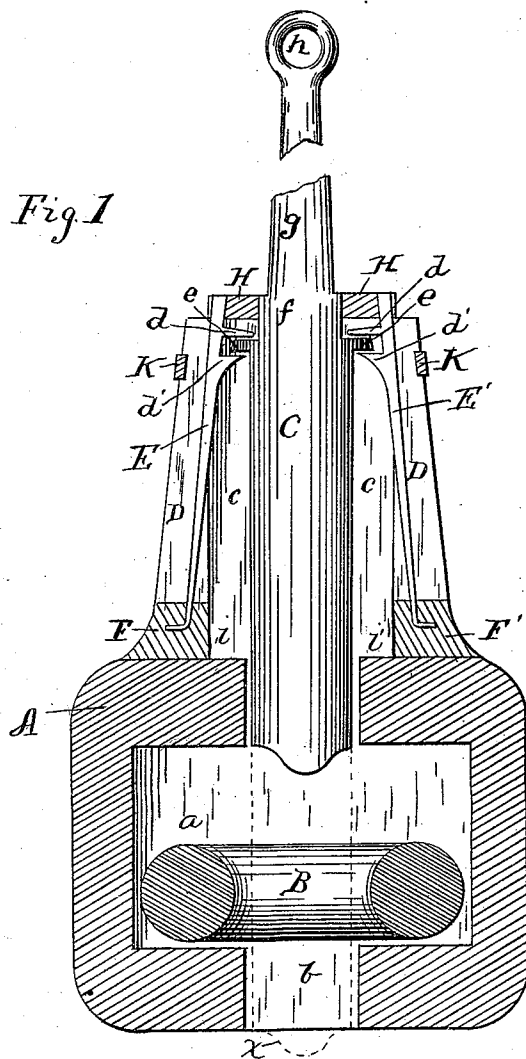


J. M. LARKIN.
CAR COUPLING.

No. 553,587.

Patented Jan. 28, 1896.



Witnesses.

H. J. Curry.
W. B. Pettus

Inventor
John M. Larkin
by Mr. M. Curry

Atty.

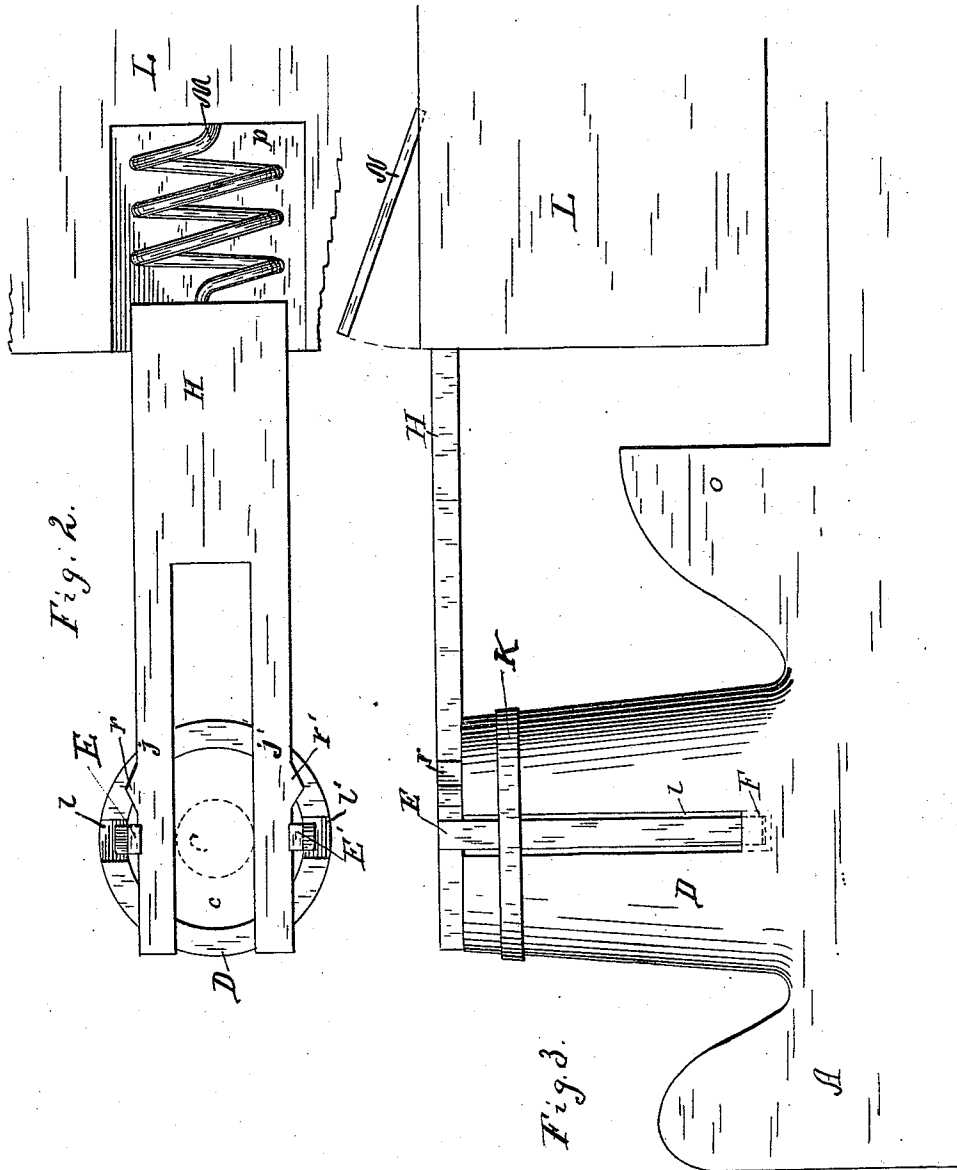
(No Model.)

2 Sheets—Sheet 2.

J. M. LARKIN.
CAR COUPLING.

No. 553,587.

Patented Jan. 28, 1896.



Witnesses
H. I. Curry.
W. B. Pettus

Inventor
John M. Larkin
by W. W. Curry
Attorney

UNITED STATES PATENT OFFICE.

JOHN MACKEY LARKIN, OF MEMPHIS, TENNESSEE.

CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 553,587, dated January 28, 1896.

Application filed October 12, 1895. Serial No. 565,467. (No model.)

To all whom it may concern:

Be it known that I, JOHN MACKEY LARKIN, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Car-Couplers, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in car-couplers of the common link-and-pin class, and is designed to secure the automatic coupling of freight and other cars.

It consists of a draw-head provided with a turret and springs for holding the pin in position, of a pin with the head so constructed as to be held by the springs, and of a thrust-bar so arranged as to open the springs by and at the moment of impact of the draw-heads, allowing the pin to drop into the link, as shown in the drawings, and fully set forth in the specification. As the danger to the operator is in coupling approaching cars, not in uncoupling those that are separating, this device leaves the uncoupling to be done by hand.

In the drawings, which are part of the specification, on Sheet 1, Figure 1 is a section across the draw-head on a line central to the pin with part of the latter cut away. On Sheet 2, Fig. 2 is a plan, omitting the body of the draw-head, part of the bumper-block of the car cut away and the pin shown by a dotted line. Fig. 3 is a side view with only a part of the draw-head shown.

In all the figures the same letters indicate the same parts.

In the figures, A is the draw-head, differing from those in use only as herein indicated.

B is the link and C the pin.

a is the link-chamber of the draw-head, b the pin-hole, and c a shoulder to prevent the draw-head being driven too far under the car.

On the body of the draw-head and integral to it is erected a turret D, the two sides of which are opened or slotted, l l', to receive two springs E E', which are made of steel, brass, or other suitable metal, sufficiently strong and flexible for their intended purpose, the lower ends securely set in base-

blocks F F' at the bottom of the side openings, the upper portions being free. Near the top of these springs are two spurs on each, projecting inward, d d', shaped so as to engage the head of the pin e. This pin-head is shaped so as to be held between the springs and also to rest on the bottom of the turret-chamber i i' when engaging the link, the descent of the pin being shown by the dotted line x.

K is a band around the turret near the top to add strength, and also to prevent the springs from being pressed too far outward.

H is a thrust-bar, one end of which is solid and is anchored in a mortised recess p of the bumper-block L of the car by means of a coiled spring M. This spring will be joined to the bar and fastened to the bumper-block in any usual manner, and so as to allow the necessary play to meet the motions of the car, as well as to allow of the bar being raised and lowered in manipulating the pin. The recess of the bumper-block with its spring is covered by a hinged lid or plate N. The forward end of the thrust-bar is divided into two prongs j j', extending over and sliding upon the top of the turret between the tops of the two springs and embracing the shank of the pin f. Each prong of the bar has on its outer side a swell or shoulder r r', adapted to press apart the springs as the bar is thrust forward by the contact of the faces of the two draw-heads, and thus automatically release the pin, letting it descend and effecting the coupling. The pin is constructed with a shaft g and a top h, extending above the head and shank of sufficient length to allow of its being taken hold of in uncoupling and sized to pass between the prongs of the bar. It may thus be lifted out entirely or into engagement with the springs.

Having thus described my invention and the uses of its several parts, its operation is obvious. In coupling cars one end of a link is inserted in a draw-head in the usual manner. The thrust-bar is raised and the pin inserted in the turret-chamber between the springs of the other draw-head and the bar lowered to its place again. The approach of the cars inserts the link, and the contact of the face of the draw-heads thrusts forward

the bar, the shoulders of which press apart the springs, releasing the pin, which drops by gravity and secures the link. In uncoupling, the top of the pin is grasped and lifted into engagement with the springs, where it is ready for use again, or by raising the end of the thrust-bar it can be entirely withdrawn.

Having described my invention and its operation, what I claim as my invention, and desire to secure by Letters Patent, is—

1. In a car-coupler the combination with a link and pin, of a drawhead having erected integral with its upper surface a turret with slotted sides, girdled with a band, with two springs in the slots anchored in base-blocks, each spring having two spurs as and for the purpose shown and described.

2. In a car-coupler the combination with a link and turreted drawhead, of a pin with an expanded head fitting between the spurs of the turret springs, and having a shank, shaft fitting between the prongs of a thrust bar, and having a top above the head, as and for the purpose shown and described.

3. In a car-coupler the combination with a link, pin and turreted drawhead, of a thrust-bar, having one end solid, and the other end divided into prongs, each with a shoulder on

its outer side, as and for the purpose shown and described.

4. In a car-coupler the combination with a link, pin, turreted drawhead, thrust-bar, and the bumper-block of a car, of a coiled spring set in a recess of the block and attached to the block and the solid end of the bar, and covered by a hinged lid, as and for the purpose shown and described.

5. In a car-coupler the combination with a car and link, of a drawhead having integral to its upper surface a turret with slotted sides, girdled with a band, with two springs set in base-blocks in the slots, the springs having spurs on their inner sides; a pin with an expanded head to fit into the spurs, with a shank, shaft and top above the head; a thrust-bar having one end solid and the other divided into two prongs, each prong with a shoulder on its outer side; and a coiled spring set in a recess of the bumper-block, attached to the block and the thrust bar, and covered with a hinged lid, as and for the purpose shown and described.

JNO. MACKEY LARKIN.

Witnesses:

WALTER J. JOYCE,
W. MORRITY.